











video	animation
①	⑧  $\nabla_s \textcircled{B}_4, \nabla_s \textcircled{B}_2$  $s \textcircled{A} M_s \text{ low}_0$ fade vert, depth $\nabla_s \sum_T 1\frac{1}{2}$  all off
②	⑨ $\nabla_s M_3, \nabla_s \textcircled{A} M_s \text{ hi}_0$
③	  $s_1 \cdot 1 \cdot s_{0-4}$ thru zero fade off depth, at  $s \textcircled{A} M_s \text{ low}_{0-1}$ 
④	⑩ repeat ② use ∇  $s_1 \textcircled{B}_3-1$ $s_1 \textcircled{B}_1-3 / T_3$ vert off $\sum_T 3-1$
⑤	⑪ mix. sattu popper. feedback $\nabla_s \sum_T 1\frac{1}{2}$ titles.  $s \textcircled{A} M_s \text{ hi}_{0-1}$


A - hi amplitude.

AM - amplitude modulation (eq 3 AM, low ϕ (spiral)).

 zoom back






 zoom up.

 fold in width

 fold in length.

Composition for Video Synthesizer #4


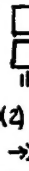



8/19/72

video	animation	color	audio
①	(B) color bars.  $\nabla_s \oplus_4, \nabla_s \oplus_2$  $s \curvearrowright AM_s low_{0-1} \phi$ (spiral) fade vert, depth  $\nabla_T \oplus_{1/2}$  \updownarrow , all off	$\triangleright O_1, B_2, BG_3, G_4, R_5$ Δ W_1, BG_2	① ③
②	(M) $\nabla_s \cap_3, \nabla_s \cap_3 AM(s hi_{0-1} + s low_{0-1})$ $\nabla_s \cap_3, \nabla_s \cap_3 AM(s hi_{0-1} + s low_{0-1})$ \updownarrow , all off	$\triangleleft B_{1-2}, W_{3-5}$ Y_1, P_2, B_3, G_4, R_5	②③
③	$(\nabla_s \oplus_{1-1}, \nabla_s \oplus_{0-4})$ thro zero fade off depth, at point $s \curvearrowright AM_s low_{0-1}, s \cap_{0-1}$ \updownarrow	$\Delta W_1, B_2$ \triangleright	①②③ ① ②③
④	(M) repeat ②, use $\nabla_s \cap_3$  $s \cap_{3-1}$ $s \cap_{1-3}, T \cap_3$ vert off $T \cap_{3-1}$	Δ $\triangleright B_1, R_2, G_3, Q_4, Y_5$	① ③
⑤	(B) mix. satty popper. feedback $\nabla_T \cap_{1/2}$ titles. $s \curvearrowright AM_s hi_{0-1} \phi$	$\Delta B_1, W_2, B_{3-5}$ B_1, O_2	③

idth)

to horiz

A Tape for

video.	ani:
	colc
ⓑ part one edit.	
part one	$\tau \Xi$
part two	$s \bar{\theta}$
part three. edit.	
part three	
edit	
part three	
edit.	
parts three + four.	
edit	
part four edit.	
parts three + four	
edit.	
ⓑ mix parts three + four.	

feed


title

over amplitude.

$\bigcirc_{s \rightarrow 3} \Delta_{s \rightarrow 3} \phi_{s \rightarrow 1} \text{ (Spiral) }.$

A Tape for Alix .

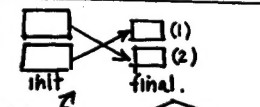


9/2/72

video.	animation	color.	audio.
	color bars		① only.
⑤ part one edit.		$\Delta R_1, B_{12}, W_{3-5}$	
part one	$\sum_{T=1}^2 \frac{1}{2} \leq$	O_{1-5} $\triangleright B_1, BG_2, O_3, Y_4, W_5$	
part two	$s \oplus_1$ 		
part three edit.		$\Delta R_1, B_{12}, W_{3-5}$	

#4

8/19/72

color	audio.
	① ③
$\triangleright O_1, B_2, BG_3, G_4, R_5$	
Δ W_1, BG_2	
$\triangleleft B_{1-2}, W_{3-5}$ Y_1, P_2, B_3, G_4, R_5	② ③
$\Delta W_1, B_2$	① ② ③
\triangleright	①
	② ③
Δ	① ③
$\triangleright B_1, R_2, G_3, O_4, Y_5$	
$\Delta B_1, W_2, B_{13-5}$ B_1, O_2	③

part three	$s \oplus_{0-3}$ $s \oplus_{0-3}$ depth, vert off \rightarrow (unit). $\bigcirc_{s \rightarrow 3} \Delta_{s \rightarrow 3} \phi_{s \rightarrow 1} \text{ (Spiral) }$	G_{1-5} $\triangleright B_1, P_2, G_3, BG_4, O_5$
edit		
part three	 $(1) \rightarrow (2)$ \rightarrow $s \oplus_1$  \rightarrow $s \oplus_{0-3} \Delta_{s \rightarrow 3} \phi_{s \rightarrow 1}$	ΔB_{1-5} $\triangleright W_1, BG_2, B_3, R_4, G_5$ B_4, P_2, G_3, BG_4, O_5
edit.		
parts three + four.	 (1)(2)(3)(4) \rightarrow $s \oplus_{1-3} \Delta_{s \rightarrow 3} \phi_{s \rightarrow 1} \text{ (flowers) }$ \rightarrow $s \oplus_{0-3}$ all off \leftrightarrow	ΔO_{1-5} $\triangleright B_1, BG_2, O_3, Y_4, W_5$
edit		
part four edit.		$\Delta R_1, B_{12}, W_{3-5}$
parts three + four	(1)(2)(3), 3 ramps I/F \rightarrow $s \oplus_{0-1}, s \oplus_{0-1}$ all off	P_{1-5} $\triangleright W_1, BG_2, B_3, R_4, O_5$
edit.		
⑤ mix parts three + four.	feedback titles	$\triangleright B_1, W_2, B_{13-5}$ B_1, O_2 $\Delta B_1, P_2, B_3, R_4, O_5$

Videotape by Walter Wright - Program.

① "31" 6/16/72

1/2" Sony color - an abstract tape using a series of still photographs & computer drawn cells - intended to demonstrate the potential of a video synthesizer - grand prize winner, First National Video Tape Festival.

② Composition #4 - Son of Godzilla 8/20/72

1/2" Sony color - the last in a series of compositions for live TV input - uses two channels of video (a movie Son of Godzilla and the Trenton 300 Stock Car Race) and three audio tracks (the movie, the stock car race and the synthesizer).

③ A Tape for Alix 9/3/72

1/2" Sony color - a composition using prerecorded tape (from an Akai 1/4" porta pak) as input - pieces of the original tape are introduced unannounced then repeated in animation - a mood piece.

④ Hendrix, Joplin, Alice Cooper 9/14/72

1/2" Sony color - real time animation over an original 2" tape - the Hendrix sound track is distorted on the master.

⑤ Paper Shoes 10/7/72

2" quad hi band color - animation of two basic cells (one of horiz lines the other vertical lines) done in two passes - the first pass becomes background over which the second pass is keyed - the track is Paper Shoes by Toko Ono.

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animate "computer" system.
 Scanimate is a first
 Images are input in a
 line b/w vidicon cameras
 artwork, a TV monitor, etc),
 in a studio camera.
 xss thru a video mixer to
 (control unit) where position &
 is controlled. The input TV raster
 (left, up or down; it may be
 right); it may be reduced
 or a point reappearing

ators. The horizontal oscillator
 -to right producing a wave-
 down thru the TV image.
 ons the raster lines up & down.
 The depth oscillator
 2 raster producing, at low
 & at higher frequencies
 also controls the axis,

re folds) and allows
 as many as (5) separate

(5) more oscillators, timing
 using separate control over
 re (2) high speed oscillators
 re locked to the horizontal
 al pair of oscillators running
 used to generate circles,
 . And finally one
 for similar to those on the CPU
 tion Aid allow amplitude
 keyboard these oscillators
 real, depth, width, length,

The animated image is output from a
 high resolution CRT display. It is rescaned with a
 plumbicon camera at standard TV rates (525 lines/frame
 15,750 lines/sec). The output of the rescan camera goes to
 the Colorizer.

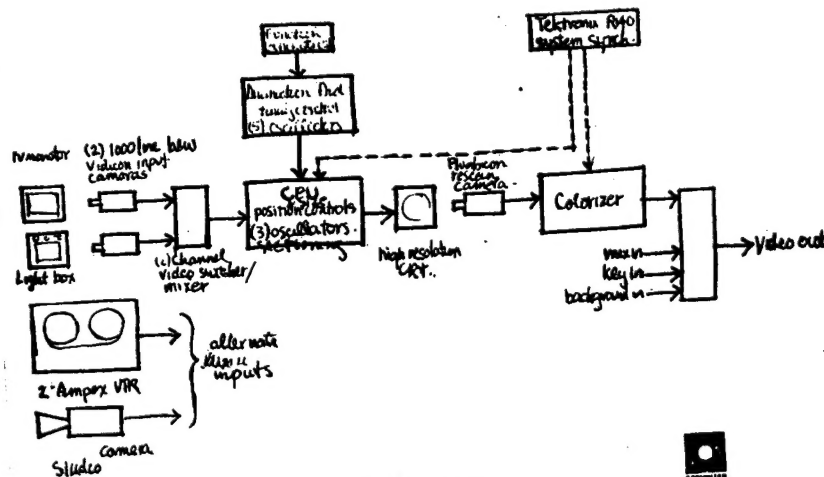
4

At the input to the Colorizer the image is encoded
 in (5) grey levels. Any color may be keyed over a grey
 level by using the Red, Green, Blue slider pots assigned
 to that level. The electronically colored image then
 goes to a switcher where other video signals may be
 mixed, keyed, or become a background replacing one of
 the five grey levels.

I play Scanimate as an instrument and all my tapes
 are made in real time without preprogramming. I also
 try to avoid editing. I am designing & hope to build
 a live performance video synthesizer using components
 of the Scanimate system and adding portable cameras,
 an 8 level colorizer, a controlled feedback loop & 1/2" & 1"
 color tape input & output. Most of my tapes have a
 score as in music. I am slowly developing a
 notation system representing the basic animations
 available on a video synthesizer. I include

with these notes a brief outline of these notation
 symbols and two scores.

5



Scanimate - Block Diagram

fram.

using a series of
n cells - intended
video synthesizer -
2 Video Tape Festival.

20/72
ies of compositions
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renton 300 Stock
(the movie,
4r.

My tapes are made on the Scanimate "computer" system built by Computer Image Corp. Scanimate is a first generation video synthesizer. Images are input in a number of ways - thru (2) 1000 line b&w vidicon cameras (these cameras may look at still artwork, a TV monitor, etc), from an Ampex 2" VTR, or from a studio camera.

Two of these input channels pass thru a video mixer to the Scanimate CPU (main control unit) where position & size of the image are controlled. The input TV raster may be repositioned right or left, up or down; it may be reduced in width or length (height); it may be reduced in overall size to a point or thru a point reappearing inverted and mirror image.

Also on the CPU are (3) oscillators. The horizontal oscillator repositions the raster lines left to right producing a wave-like distortion running up or down thru the TV image. The vertical oscillator repositions the raster lines up & down producing a rolling distortion. The depth oscillator affects the overall size of the raster producing at low frequencies a pulsating zoom & at higher frequencies a 3-D roll distortion. The CPU also controls the axis,

(the lines about which an image folds) and allows the image to be broken into as many as (5) separate sections.

The Animation Aid provides (5) more oscillators, timing control, and a patchboard allowing separate control over individual sections. There are (2) high speed oscillators (15K Hz up) which may be phase locked to the horizontal synch pulse (low speed oscillators lock to the vertical synch pulse). There is a special pair of oscillators running 90° out of phase which are used to generate circles, spirals & diamond shapes. And finally one additional low speed oscillator similar to those on the CPU. The oscillators on the Animation Aid allow amplitude modulation. Thru the patchboard these oscillators may drive horizontal, vertical, depth, width, length, axis, or intensity.

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